device. One should note that a maintenance boot image might also include those boot images that perform diagnostic functions as well. The original boot image may be stored locally on the remote computing device. Alternatively, it may be stored at another computing device coupled to the remote computing device while the maintenance boot image controls the remote computing device.

The maintenance boot image is tailored to run diagnostic or maintenance functions. Each specific maintenance boot image can be tailored to perform different functions on the remote computing device. In this manner, the selection of the appropriate boot image specifies the diagnostic and maintenance chores for the remote computing device.

The system monitors the progress of the remote computing device running under the maintenance boot image. At some specified juncture, the maintenance boot image is swapped with the original boot image. Thus, upon reboot, the remote computing device will return to its original operating boot image.

The system monitors the remote computing device. At the proper time, a second reboot is initiated for the remote computing device. This may occur when the maintenance boot image signals the system that the functional aspects of the maintenance boot image have been achieved.

As such, a system for initiating the remote operation of diagnostic and maintenance boot images for remote computing devices is envisioned. Other aspects, advantages and novel features of the present invention will become apparent from the detailed description of the invention when considered in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic diagram of a typical network of data processing systems that may employ the current invention.

Figure 2 is a schematic block diagram of an embodiment of the system of 5 Figure 1.

Figure 3 is a flow diagram of a possible operation of the system of Figure

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DETAILED DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic diagram of a typical network of data processing systems that may employ the current invention. Any of the data processing systems of Figure 1 may implement the present invention, or may be operated on by the present invention. A distributed data processing system contains an interconnected network 12. The network 12 provides communications link between all the various devices and computers connected within the distributed processing system 10. The network 12 may include permanent connections, 10 such as wire or fiber optic cables, or other types of connections such as wireless, satellite, or infrared network technology.

The network 12 may operate under a number of different operating schemes. Communications may flow between the associated components of the distributed processing system 10 under various protocols, including TCP/IP. The network 12 may also be indicative of several interconnected networks, such as the Internet.

The network 12 connects a computing device 14 and a server 16. Additionally, a storage unit 18 connects to the network 12, thus allowing the computing device 14 and the server 16 to communicate with and store data to and from the storage unit 18.

Additional computing components connected to the network 12 may include a personal digital assistant 22 and a remote network appliance 24. Additionally, an individual user may carry a so-called ▒smart card▒ 26. The smart card may contain sufficient data and/or processing capabilities to allow connection to and communication with other components of the distributed data processing system 10.